

A NEW COMBINATION IN *LUDWIGIA* SECT. *MICROCARPIUM* (ONAGRACEAE)

The following new combination is proposed in advance of ongoing monographic studies of North American *Ludwigia* in order to make the name available for numerous floristic projects and for a biosystematic study of *Ludwigia* sect. *Microcarpium* (Peng, 1987). It will be discussed and justified in my subsequent publication, and is offered at this time with minimal synonymy.

Ludwigia glandulosa* Walter subsp. *brachycarpa (Torrey & A. Gray) Peng, comb. nov. *L. cylindrica* Elliott β . *brachycarpa* Torrey & A. Gray, Fl. N. Amer. 1: 524. 1840 non *Jussiaea brachycarpa* Lam., Encycl. 3: 331. 1789. *L. glandulosa* Walter var. *torreyi* Munz, Bull. Torrey Bot. Club 71: 164. 1944, illeg. subst. LECTOTYPE: U.S.A. Texas: Austin Co., San Felipe, "third collection," 1833–1834, *T. Drummond* 84 [GH; isolectotypes, GOET, K (2 sheets), W; here designated].

Munz (1944) renamed this taxon because he thought that Torrey and Gray (1840) based it on *Jussiaea brachycarpa* Lam. (= *L. glandulosa* Walter subsp. *glandulosa*), which, however, is doubtful. In any case, they were free to use the same epithet for a variety, so that "*brachycarpa*" has priority at the varietal level. Here I am taking it up for the short-fruited, western subspecies of *Ludwigia glandulosa*. Munz (1944) chose a lectotype for this entity (*Hall* 219, from Hempstead, Waller Co., Texas) that was not collected until more than 30 years after Torrey and Gray wrote; his choice must therefore be disregarded. Of the two specimens they cited, only the lectotype I have chosen meets the criteria of this entity as we now understand it, having short mature fruits. In this respect it agrees more fully with Torrey and Gray's diagnosis. Chapman's collection (no. 38) from middle Florida, without definite locality (GH, NY), is an immature specimen of subsp. *glandulosa*, which Torrey and Gray considered to be their short-fruited variety.

Ludwigia glandulosa subsp. *brachycarpa* differs from the subsp. *glandulosa* in its smaller stature, narrower leaves, and smaller flowers and capsules. In addition, the seed surface pattern of these two entities—a feature that is often diag-

nostic in *Ludwigia* sect. *Microcarpium*—is sharply distinct. In *L. glandulosa* subsp. *glandulosa*, the cells are longitudinally elongate, whereas in subsp. *brachycarpa*, they are transversely elongate.

Ludwigia glandulosa subsp. *brachycarpa* occurs along the Gulf Coast from extreme southwestern Louisiana to Nueces County, Texas, and northward through eastern Texas to southcentral Oklahoma. Subspecies *glandulosa*, in contrast, has a much broader distributional range: it occurs throughout the Atlantic and Gulf Coastal Plains and the Mississippi Embayment, westward to eastern Texas and southeastern Oklahoma.

Ludwigia glandulosa subsp. *brachycarpa* thus has a range that lies along the western edge of that of the subsp. *glandulosa* in northern Texas and Oklahoma. It grows in the same areas as subsp. *glandulosa* throughout much of its range, but extends farther south and west. The distinctiveness of these two subspecies is probably maintained by self-pollination.

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